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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,970	06/14/2001	Masahiro Nagatani	35.C15458	5065
5514	7590	01/12/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			DIVINE, LUCAS	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/879,970

**Applicant(s)**

NAGATANI, MASAHIRO

**Examiner**

Lucas Divine

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 14 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/29/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **209 and 210**.  
Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

3. Claim 5 is objected to because of the following informalities: page 21 line 8 – **file** should be *files* since all of the database files are deleted. Appropriate correction is required.

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4. Claim 3 is objected to because of the following informalities: page 20 line 24 – **informations** should be *information*. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding page 21 lines 1 – 2, the phrase “**wherein the number of databases created by the calibration on the basis of said management file**” does not include any verb and therefore is an incomplete phrase that does not particularly point out or distinctly claim anything about the number of databases.

Regarding page 21 line 4, the phrase “**other created database is deleted**” does not particularly point out which of the created databases is deleted. There are multiple databases created and it is unclear and indefinite which of these is deleted or how such a selection is made.

6. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding page 21 lines 16 – 17, the phrase “**said original database corresponding to the model information**” is unclear and indefinite because there is no original database corresponding to the model information claimed previously. Examiner does not understand whether or not the original database claimed in claim 6 is the same original database as discussed in parent claim 1 or a new original database corresponding to model information.

Regarding page 21 lines 16 – 18, the phrase “**said forming step ... creates said management file**” is unclear and indefinite because in claim 1 the applicant claims that the calibration processing forms the management file (page 20 lines 12 – 13). Thus the claim does not particularly point out how the management file is formed because it is unclear which step completes the forming of the management file.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The image processing program claimed is merely a set of instructions per se. Since the image processing program is merely a set of instructions not embodied on a computer readable medium to realize the computer program functionality, the claimed subject matter is non-statutory. See MPEP § 2106 IV.B.1.

### ***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1 – 5 and 7 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama (US 6333790) and Tanaka et al. (US 6151135).

Regarding claim 7, Kageyama teaches **an image processing apparatus 200** that can print in color (col.13 line 60) that includes a print processing part 2140 for performing image correction and preparing print jobs for correct output (Fig. 2). The image processing apparatus further comprises **calibration processing that forms a management file** (printer system 200 continuously calibrates to keep management file 2121 updated, for example, when a page is printed, printer information db is updated with the new no. of sheets shown in Fig. 10 ref. no. 10c ) **based on head discriminating information of a head used in said output unit** (printer information db 2121 which is a management file that includes head discriminating information for toner or ink cartridge heads used in printer engine 2200 [Fig. 10 section 10c, wherein the use information for toner can be used to decide whether or not use this toner for output, further the system can include ink jet cartridges including ink jet heads that would have information stored in 2121 as well – col. 6 line 64, wherein the printer can be implemented with an ink jet method]).

While Kageyama teaches a color image processing apparatus with a print processing part 2140 for performing image correction and preparing jobs for correct output, Kageyama does not specifically teach that this unit includes specific color reproduction processing for the color printing.

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Tanaka teaches an apparatus for color reproduction processing for color printing systems including:

**holding means** (memory 18) **for holding an original database** (color conversion table, which acts as a database as a collection of data stored for easy retrieval, is held in memory 18) **in which a correction condition** (condition of input color that needs to be corrected) **corresponding to a reproducing property** (color of reproduction) **of an output unit** (print processor 9 shown in Fig. 9 is the output unit for printer 5) **is stored;**

**forming means** (color conversion table former 17) **for writing a correction condition formed by calibration processing** (calibration done in calculating the modified area and amount for color processing in functional unit 16 and the color modification parameter normalizer 12 which form a correction condition and forward it to forming unit 17) **in the original database to create a new database** (col. 6 lines 60-65, wherein the table former forms a new color conversion table on the basis of the calibration processing discussed above and the new table is stored in holding means 18); **and**

**correction processing means** (data converter 21) **for effecting correction processing regarding input data** (correcting inputted RGB data to CMYK data for printing) **by using the created new database** (uses new table from table memory 18; col. 7 lines 7-9).

It would have been obvious to one of ordinary skill in the art that the color correction processing section of Tanaka can be implemented in a color printing system such as that of Kageyama. The motivation for doing so would have been to correctly convert RGB to CMYK data. The system of Tanaka would have been further advantageous because it allows for easy modification of color image data (col. 2 line 35) including the operator being able to select and

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use a color modification parameter 10 in color image processing, thus making the system obviously attractive to a color printing system such as that of Kageyama.

Regarding claim 1, the structural elements of apparatus claim 7 perform all of the method steps of method claim 1. Therefore, claim 1 is rejected for the same reasons as stated in the rejection of apparatus claim 7 above.

Regarding claim 2, which depends from claim 1, the combination implicitly teaches that **said management file is held in a file different from a file for holding said new database**. The added color processing section of Tanaka would be placed in the print processing part 2140 of Kageyama, thus the memory 18 of Tanaka which holds the new database is in a different part of printer 200 (2410) from the management file 2121, which is in printer management part 2120. Since the memory locations for storing each are different, the files are therefore different.

Regarding claim 3, which depends from claim 1, Kageyama further teaches that **when said output unit uses a plurality of heads, the database file is managed on the basis of a combination of the head identification informations of said heads** (in a ink jet printing system as can be implemented by Kageyama [col. 6 line 64] a plurality of heads would be used in the output unit, ones for C, M, Y, and K; if this was the case the management file shown in Fig. 10 would include information regarding each consumable item [10c] including each head and the management part 2120 that uses the management file would implicitly manage the complete printer, including the print processing part based on the information regarding each head).



Regarding claim 4, which depends from claim 1, Tanaka further teaches that **the number of databases created by the calibration on the basis of said management file, and, when the number of databases becomes greater than a predetermined value, other created database is deleted** (it is implied that the color conversion memory acts like other standard memories, deleting older information when the capacity [predetermined value] is run out, thus older conversion tables are deleted when the memory becomes full to make room for new tables).

Regarding claim 5, which depends from claim 1, Kageyama further teaches that **upon uninstallation of a printer driver, all of the created database file and the management file are deleted** (printer driver software is the software in the printer controller 2100 that controls the completion of print processing for the printer; it is standard practice in the art that when software is uninstalled, relating information stored on a hard disk or memory is also deleted; since the database and management files are stored in memories relating to the printer processing software, if the software were uninstalled it would have been implied to delete the related management file and database file from memory).

Regarding claim 8, the image processing program claim 8 performs the steps of method claim 1. Therefore, claim 8 is rejected for the reasons stated in the rejection of method claim 1. The use of a processor and memory to hold and execute such a program are implied in the structure of printer controller 2100 of printer 200 in the printing system of Kageyama.

Regarding claim 9, claim 9 is the same as claim 2 as it inherits the method steps of parent claim 1. Both claim 2 and claim 1 are rejected under 35 U.S.C. 103(a) as being unpatentable

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over Kageyama and Tanaka as discussed above in the rejections of claims 1 and 2. Therefore, claim 9 is rejected for the same reasons as stated above in the rejection of claims 1 and 2.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-5825394, Gilbert et al, 10-20-1998: teaches a thermal head calibration and operation method for fixed imaging elements including correcting data based on print head information.

US-5664072, Ueda et al., 9-2-1997: teaches a color conversion device.

US-5835624, Ueda et al., 11-10-1998: teaches a color conversion device including RAM for holding conversion information and printer profiles for use in color converting.

US-5508826, Lloyd et al., 4-16-1996: teaches a method and apparatus for calibrated digital printing using a four by four transformation matrix including a color correction look-up table which adjusts image color values to account for the ink/paper variations.

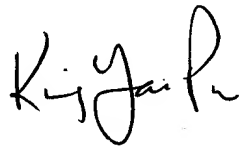
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Divine whose telephone number is 703-306-3440. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ljd



**KING Y. POON  
PRIMARY EXAMINER**

Lucas Divine  
Examiner  
Art Unit 2624